Monatshefte für Chemie
Chemical Monthly

An International Journal of Chemistry

Vol. 135, 2004

ISSN 0026-9247

SpringerWienNewYork

Monatshefte für Chemie
Chemical Monthly

Österreichische Akademie der Wissenschaften
(Mathematisch-Naturwissenschaftliche Klasse)
und Gesellschaft Österreichischer Chemiker

Editorial Board

H. Falk, Linz (Managing Editor)
H. Gamsjäger, Leoben
B. Kräutler, Innsbruck
F. Pittner, Wien
U. Schubert, Wien
P. Schuster, Wien

Regional Editors

P. Braunstein, Strasbourg
E. Königsberger, Murdoch
R. Neier, Neuchâtel
A. Pfitzner, Regensburg
K. Sawada, Niigata
O. Vogl, Amherst, MA

Advisory Board

U. Brinker, Wien
W. Buchberger, Linz
W. Fleischhacker, Wien
L. H. Gade, Heidelberg
G. Grampp, Graz
H. Griengl, Graz
G. Gritzner, Linz
E. Haslinger, Graz
O. Hofer, Wien
O. Kappe, Graz
B. Keppler, Wien
G. Kollenz, Graz
C. Kratky, Graz
E. Küchler, Wien
D. A. Lightner, Reno, NV
H. Lischka, Wien
W. Mikenda, Wien
R. Micura, Innsbruck
C. R. Noe, Wien
J. Schantl, Innsbruck
K. Schlögl, Wien
H. Schmidbaur, München
H. Sterk, Graz

Editorial Assistant: P. Gärtner

The exclusive copyright for all languages and countries, including the right for photomechanical and any other reproductions including microform is transferred to the publisher.

Ownership and Copyright
© SpringerWienNewYork 2004

Author Index

Abd El-Wahab Mohamed M. M.: Structural and Catalytic Activity of V_2O_5-Supported on $AlPO_4$ Catalysts 357

Abdallah Magda A., s. Mosselhi Mosselhi A. N.

Abdel Moneam Maisa I.: Synthesis and Reactions of Novel Pyrimido[4,5-*c*]pyridazine and *s*-Triazolo[3,4:2,3]pyrimido[4,5-*c*]pyridazine Derivatives 45

Abedini Masoumeh, s. Shirini Farhad

Ackermann Olaf, s. Kirsch Stefan

Aghapoor Kioumars, s. Darabi Hossein R.

Ahaidar Abderaouf, s. Fernández David

Ahmed Farag I. S., s. Osman Fayez H.

Ahmed Saleh A.: Photochromism of Dihydroindolizines. Part III. Synthesis and Photochromic Behavior of Novel Photochromic Dihydroindolizines Incorporating a Cholesteryl Moiety 1173

Akhbari Maryam, s. Hashemi Mohammed M.

Albericio Fernando, s. Fernández David

Albericio Fernando, s. Pumpor Ksenia

Alexander Van Hook W., s. Chang Bong Ho

Alipanah Ladan, s. Mirkhani Valiollah

Al-Masoudi Najim A. L., s. Khodair Ahmed I. A.

Al-Shihry Shar S., s. Abd El-Wahab Mohamed M. M.

Álvarez Mercedes, s. Fernández David

Amer Atef M.: On the Chemistry of Cinnoline V Reactions of 4-Aminocinnolines with Amines 595

Amiri Rahebeh, s. Yavari Issa

Anacona J. R.: Crystal Structure and Superoxide Dismutase Activity of $[Cu(ethylenediamine)_2Cl][PF_6]$ 785

Arcelli Antonio: Chiral 1,4-Morpholine-2,5-diones. Synthesis and Evaluation as Glucosidase Inhibitors 951

Arefrad Hamedeh, s. Azizian Javad

Ašanin Darko P.: Hydrolysis of the Peptide Bond in *N*-Acetylated *L*-Methionylglycine Catalyzed by Various Palladium(II) Complexes: Dependence of the Hydrolytic Reactions on the Nature of the Chelate Ligand in *cis*-$[Pd(L)(H_2O)_2]^{2+}$ Complexes 1445

Asker Sherif, s. Amer Atef M.

Atarodiekashani Assieh, s. Pirelahi Hooshang

Aubry Jean-Marie, s. Ganglberger Thorsten

Azizian Javad: Synthesis of Some Novel γ-Spirolactones 729

Bach Thorsten, s. Kirsch Stefan

Badgujar Naresh S., s. Jachak Madhukar N.

Bae Young Chan, s. Chang Bong Ho

Bagheri Mohammad, s. Memarian Hamid R.

Bahrami Kiumars, s. Mohammadpoor-Baltork Iraj

Balducci Daniele, s. Arcelli Antonio

Bandgar Babasaheb P.: Efficient and Selective Halogenation of Allylic and Benzylic Alcohols under Mild Conditions 1251

Bandgar Babasaheb P.: Hexamethylenetetraamine-Bromine Catalyzed Rapid and Efficient Synthesis of Bis(indolyl)methanes 1265

Bandyopadhyay Anwesha, s. Majumdar Krishna C.

Bansal Geeti, s. Khurana Jitender M.

Barriada José L., s. Brandariz Isabel

Belicová Anna, s. Saloň Jozef

Bensch Wolfgang, s. Schaefer Michael

Bettigeri Sampada V., s. Bandgar Babasaheb P. 125, 1265

Beyer Anton, s. Lawtrakul Luckhana

Beyer Anton: Systematic Investigation of Non-Nucleoside Inhibitors of HIV-1 Reverse Transcriptase (NNRTIs) 1047

Bica Katharina, s. Gärtner Peter

Bieniek Adam: Application of Organolithium and Related Reagents in Synthesis, Part 29. A Concise Regiospecific Conversion of Benzoic Acids into 5-(2-Carboxyphenyl)-5-phenylpent-2-enoic Acids 69

Bijanzadeh Hamid R., s. Shaabani Ahmad 441, 589

Binder Wolfgang H.: Domain Formation in Lipid Bilayer Membranes: Control of Membrane Nanostructure by Molecular Architecture 13

Biswas Anindita, s. Majumdar Krishna C.
Bogdanowicz-Szwed Krystyna: Diastereoselective *Diels-Alder* Reaction of 2-Thienyl and 2-Furyl Substituted 3-Propenethioamides with Electron Deficient Dienophiles 97
Bogdanowicz-Szwed Krystyna: Synthesis of Functionalized (2-Thienylcarbonyl) thiazoles and 4-(2-Thienyl)pyridines by Reaction of (2-Thienylcarbonyl)thioacetanilides and their Enamine Derivatives 201
Bogdanowicz-Szwed Krystyna: Synthesis of Functionalized Spiro[cycloalkanono-2,3′-thiophenes] *via* Tandem Conjugate Addition-Cyclization of 3-Oxoacid Thioanilides to Nitroalkenes 1415
Böttcher Christoph, s. Burger Klaus
Böttcher Christoph: Hexafluoroacetone as Protecting and Activating Reagent. A New Approach to *N*-Glycosides 853
Böttcher Christoph: Hexafluoroacetone as Protecting and Activating Reagent. Glycosylated Malic, Citramalic, and Thiomalic Acid Derivatives, New Glycosylated Building Blocks for Drug Design 1225
Brandariz Isabel: Comparison of Several Calibration Procedures for Glass Electrodes in Proton Concentration 1475
Brandi Alberto, s. Cordero Franca M.
Braybrook Carl, s. Moorhoff Cornelis M.
Brborić Jasmina S.: The Synthesis of Novel Iodinated Iminodiacetic Acid Analogues as Hepatobiliary Imaging Agents 1009
Brito Cristela M., s. Silva Artur M. S.
Brun Reto, s. Seebacher Werner
Brunner Henri: Enantioselective Catalysis. Part 156. Ruthenium Procatalysts and 2-Pyridinealdehyde/(*S*)-*NOBIN*-Derived Cocatalysts in the Transfer Hydrogenation of Acetophenone with 2-Propanol 885
Budni M. L., s. Neelgund Gururaj M. 343, 1395
Budzowski Artur, s. Bogdanowicz-Szwed Krystyna
Bugarčić Živadin D.: Rate and Equilibrium Data for Substitution Reactions of $[Pd(dien)Cl]^+$ with *L*-Cysteine and Glutathione in Aqueous Solution 151
Burgemeister Thomas, s. Mahboobi Siavosh
Burger Klaus, s. Böttcher Christoph 853, 1225
Burger Klaus, s. Pumpor Ksenia
Burger Klaus: Hexafluoroacetone as Protecting and Activating Reagent. A New Approach to *N*-linked Glycopeptoids 865
Burger Nicoletta, s. Foretić Blaženka

Catalano Vincent J., s. Ghosh Brahmananda 1305, 1503
Cavaleiro José A. S., s. Silva Artur M. S.
Černák Juraj: Copper/Zinc Oxide Catalysts. Part XII. Solid Solution Formation in the CuO/ZnO System. X-Ray Powder Diffraction Study 1081
Chang Bong Ho: Modified Double Lattice Model for Oligoethylene/Oligostyrene Blends 493
Chauhan Sushma, s. Khurana Jitender M.
Chen Qingqi, s. Yang Lanying
Chen Ru-Yu, s. Deng Sheng-Lou
Chizhov Dmitry L., s. Yachevskii Danil S.
Cho Hee Cheon, s. Chang Bong Ho
Chomič Jozef, s. Černák Juraj
Chudík Miloslav, s. Saloň Jozef
Cironi Pablo, s. Fernández David
Cismas Crina, s. Stuparu Mihaiela
Cmiljanović Nataša, s. Gutman Ivan
Colak Ahmet, s. Saglam Nagihan
Cordero Franca M.: 5-Spirocyclopropane Isoxazolidines as Versatile Intermediates in Organic Synthesis 649
Cristea Ioan, s. Kozma Erika
Csámpai Antal, s. Sohár Pál
Cuevas Carmen, s. Fernández David
Cyrański Michał K., s. Dugovič Branislav

Danelón Gerardo, s. Fernández David
Darabi Hossein R.: A Fast and Solvent-Free Conversion of Thioamides into Thioesters 79
Daryanavardedargahani Hossein, s. Pirelahi Hooshang
De Sarlo Francesco s. Cordero Franca M.

Değirmenbaşı Nebahat: Quinaldinium Fluorochromate and Quinaldinium Dichromate: Two New and Efficient Reagents for the Oxidation of Alcohols 407
Değirmenbaşı Nebahat, s. Özgün Beytiye
Dehghani Mohammad, s. Memarian Hamid Reza
Dekamin Mohammad G., s. Moghaddam Firouz Matloubi
Delchev Vassil B.: A DFT Study of Electron Structure, Geometry, and Keto–Enol Tautomerism of 3-Oxopropionyl Halogenides 371
Delchev Vassil B.: Electron and Geometry Structure of Hydrogen-Bonded Complexes of Guanine with One Molecule Methanol. A DFT Level Study 1373
Delchev Vassil B.: Hydrogen Bonded Complexes of Acetylacetone and Methanol: HF and DFT level Study 249
Deng Sheng-Lou: A Convenient Synthesis of Phosphorines and Phospholidins by *Lawesson*'s Reagent and Microwave Irradiation 1113
Djahaniani Hoorieh, s. Yavari Issa
Djuran Miloš I., s. Ašanin Darko P.
Dogović Nikola, s. Brborić Jasmina S.
Döpp Dietrich, s. Gomaa Mohsen A.-M.
Döpp Dietrich, s. Memarian Hamid R.
Döpp Dietrich, s. Memarian Hamid Reza
Duda-Johner Seraina, s. Pick Rainer
Dugovič Branislav: Diastereoselectivity of Chiral Nitrone 1,3-Dipolar Cycloaddition to *Baylis-Hillman* Adducts 685

Einzinger Christian, s. Gärtner Peter
Einzmann Mirko, s. Binder Wolfgang H.
Eisenmann Anke: Treatment of Peak Intensity Uncertainties in NMR Relaxation Data Analysis Can Lead to Severe Artifacts 1089
El Ashry El Sayed H., s. Khodair Ahmed I. A.
El-Abadelah Mustafa M., s. Thaher Bassam Abu
El-Ayaan Usama: Synthesis and Structural Studies of Group 2B Transition Metal Complexes with the Bulky Nitrogen Ligand Bis[*N*-(2,6-diisopropylphenyl) imino]acenaphthene 919
Elguero José, s. Silva Artur M. S.
El-Hiti Gamal A.: Application of Organolithium in Organic Synthesis: A Simple and Convenient Procedure for the Synthesis of More Complex 6-Substituted 3*H*-Quinazolin-4-ones 323
El-Mobayed Mathat M., s. Amer Atef M.
El-Samahy Fatma A., s. Osman Fayez H.
El-Sayed Ibrahim: Synthesis of Stable Sulfines by Oxidation of Chlorodithioformates 879
Enomoto Shigendo: NMR and MO Studies on the Molecular Structure of a Fluoranthene-Benzene Complex 471
Epsztajn Jan, s. Bieniek Adam
Eshghi Hossein: *o*-Phenylenediamine as a New Catalyst in the Highly Regioselective Conversion of Epoxides to Halohydrins with Elemental Halogens 1101
Essawy Samy A., s. Böttcher Christoph
Essawy Samy A., s. Burger Klaus
Ettmayr Christian, s. Reimann Eberhard, 557, 959, 1143, 1289
Etzlstorfer Christoph, s. Lackner Bernd

Falk Heinz, s. Ganglberger Thorsten
Falk Heinz, s. Lackner Bernd
Falk Heinz, s. Salama Tarek A.
Falk Heinz, s. Schwarzinger Bettina
Farghaly Thoraya A., s. Mosselhi Mosselhi A. N.
Fazary Ahmed E., s. Khalil Mohamed M.
Fernández David: Synthesis of Polyheterocyclic Nitrogen-Containing Marine Natural Products 615
Fišera Lubor, s. Dugovič Branislav
Foretić Blaženka: The Dissociation Constants of 1,1′-Bis(pyridinium-4-aldoxime)trimethylene dibromide 261
Fourneron Jean-Dominique, s. Naït-Si Youssef
Fröhlich Johannes, s. Hemetsberger Margit
Fröhlich Johannes: Editorial: Heterocyclic Chemistry V

Ganglberger Thorsten: A Chemical (Dark) Source of Singlet Oxygen: Ozone Splitting Promoted by Tin(II) Salts 501
Gärtner Peter, s. Fröhlich Johannes

Gärtner Peter: Synthesis of Partially Deuterated *N*-Nitrosamines – New Standards in Tobacco-smoke Analysis 549
Gérard François, s. Černák Juraj
Ghazanfari Dadkhoda, s. Hashemi Mohammed M. 185, 793
Ghazanfari Dadkhoda: Selective Oxidation of Aryl Ketones to α-Diketones with 4-Aminoperoxybenzoic Acid Supported on Silica Gel in Presence of Air 1409
Ghosh Brahmananda: Crystal Structure and Conformation of a Bilirubin Ester 1503
Ghosh Brahmananda: Synthesis, Conformation, and Metabolism of a Selenium Bilirubin 1189
Ghosh Brahmananda: Syntheses, Crystal Structures, and Conformations of 10,10-Spiro-Bilirubins 1305
Ghosh Brahmananda, s. Tu Bin
Gil Regina, s. Bogdanowicz-Szwed Krystyna
Gomaa Mohsen A.-M.: 2-Spiroanellated 1,3-Benzodioxoles from the Reaction of 2,3-Dihydro-1*H*-pyrrol-3-ones with Tetrachloro-1,2-benzoquinone 1557
Grandi Alessandro, s. Arcelli Antonio
Grochowski Jacek, s. Bogdanowicz-Szwed Krystyna
Grosu Ion, s. Stuparu Mihaiela
Grymel Mirosława, s. Mazurkiewicz Roman 799, 807
Güner Saadettin, s. Saglam Nagihan
Gutierrez Carmen, s. Anacona J. R.
Gutman Ivan: Cyclic Conjugation in Benzo-Annelated Perylenes. How Empty is the "Empty" Ring? 1389
Gutman Ivan: Dependence of Total π-Electron Energy on the Number of Non-Bonding Molecular Orbitals 765
Györgydeák Zoltán: 2-Amino-4-aryl-1-arylideneaminoimidazoles and Acylation Products: A Multinuclear (^{1}H, ^{13}C, ^{15}N) NMR Study 173

Habibi Mohammad H.: Photooxidation of Ethylbenzene with TiO_2 and Metal Coated TiO_2 and its Kinetics 1121
Haghdadi Mina, s. Yavari Issa
Hametner Christian, s. Dugovič Branislav
Hametner Christian, s. Hemetsberger Margit
Hamuryudan Esin, s. Korkmaz Nurten
Hannongbua Supa, s. Beyer Anton
Hannongbua Supa, s. Lawtrakul Luckhana
Harms Klaus, s. Kirsch Stefan
Hasegawa Miki, s. Enomoto Shigendo
Hashemi Mohammed M.: Oxidation of Alcohols with 4-Aminopyridinium Chlorochromate Supported on Silica Gel 793
Hashemi Mohammed M.: Oxidation of Benzylic Methylene Compounds to Ketones with 4-Aminoperoxybenzoic Acid Supported on Silica Gel in Presence of Oxygen or Air 185
Hashemi Mohammed M.: Oxidation of Thiols to Disulfides by Oxygen in Presence of Cobalt(II) and Manganese(II) Salts of 4-Aminobenzoic Acid Supported on Silica Gel 41
Haslinger Ernst, s. Strommer Rainer
Hemetsberger Margit: 1-Methylgalanthamine Derivatives 1275
Henkel Gerald, s. Memarian Hamid Reza
Hennig Lothar, s. Burger Klaus
Henning Frauke, s. Brunner Henri
Hetényi Anasztázia, s. Miklós Ferenc
Heying Birgit: Synthesis, Structure, and Magnetic Properties of the Silicides *RE*IrSi(*RE* = Ce, Pr, Er, Tm, Lu) and $SmIr_{0.266(8)}Si_{1.734(8)}$ 1335
Hiremath Gurubasavaraj C., s. Mulla Rahamatalla M.
Hödl Claudia, s. Strommer Rainer
Hoeller Christa, s. Huefner Antje
Hoffmann Rolf-Dieter, s. Heying Birgit
Holzer Wolfgang, s. Györgydeák Zoltán
Holzgrabe Ulrike, s. Pick Rainer
Horvat Anica, s. Vasić Vesna
Horváthová Lucia, s. Šima Jozef
Hoshi Toshihiko, s. Enomoto Shigendo
Hosseinzadeh Rahman: 2,6-Dicarboxypyridinium Chlorochromate. An Efficient and Selective Reagent for the Mild Deprotection of Acetals, Thioacetals, and 1,1-Diacetates to Carbonyl Compounds 1243
Hu Yingyu: Synthesis, Spectroscopy, and Electrochemistry of Metallophthalocy-

anines Substituted by Propylenedithiotetrathiafulvalene Derivatives 1167
Huefner Antje: Stereoselective Synthesis of Isomers of the Naturally Occurring 13-Hydroxy-2,4,9-tetradecatrienoic Acid. Part II [1] 447
Hüfner Antje, s. Presser Armin

Imre Attila R., s. Chang Bong Ho
Isfahani A. Zeini , s. Habibi Mohammad H.
Iwunze M. O.: Fluorescence Quenching Studies of Curcumin by Hydrogen Peroxide in Acetonitrile Solution 231
Izaković Mário, s. Šima Jozef

Jachak Madhukar N.: A Convenient Route for the Synthesis of 4-Aryl- and 4-Aminopyrimidines 1529
Jančić Dejan M., s. Bugarčić Živadin D.
Jary Walther G., s. Ganglberger Thorsten
Jekő József, s. Patonay Tamás
Jirovsky David: HPLC-Analysis of Fumarates in Biological Matrices 1563
Jordis Ulrich, s. Hemetsberger Margit
Joshi Neeta S., s. Bandgar Babasaheb P.
Joule John A., s. Fernández David
Jovanović Mirjana S., s. Brborić Jasmina S.
Jovičić Jelena, s. Gutman Ivan

Kandrač Julijan, s. Leskovac Vladimir
Kapiller-Dezsöfi Rita, s. Porcs-Makkay Márta
Kappenstein Charles, s. Černák Juraj
Karaböcek Serdar, s. Saglam Nagihan
Karimi Ali R., s. Azizian Javad
Karimi-Jaberi Zahed, s. Hashemi Mohammed M. 41, 185
Khalil Mohamed M.: Equilibrium Studies of Binary and Ternary Complexes Involving Tricine and Some Selected α-Amino Acids 385
Khalil Mohamed M.: Potentiometric Studies on Binary and Ternary Complexes of Di- and Trivalent Metal Ions Involving Some Hydroxamic Acids, Amino Acids, and Nucleic Acid Components 1455
Khodair Ahmed I. A.: Thiohydantoin Nucleosides. Synthesis Approaches 1061
Khosravi Fereshteh, s. Ghazanfari Dadkhoda
Khurana Jitender M.: Facile Hydrolysis of Esters with KOH-Methanol at Ambient Temperature 83
Kirchner Karl, s. Pavlik Sonja
Kirchner Karl, s. Standfest-Hauser Christina M.
Kirsch Stefan: Regioselective Isomerisation of Highly Substituted 1-Methylenecyclohexenepoxides to the Corresponding Allylic Alcohols. Influence of the Base and of the Protecting Groups 713
Kiss-Szikszai Attila, s. Patonay Tamás
Klofutar Cveto, s. Rudan-Tasic Darja 773, 1209
Klofutar Cveto, s. Šegatin Nataša 161, 241
Knapp Martin, s. Binder Wolfgang H.
Kobayashi Michio, s. Enomoto Shigendo
Kodess Mikhail I., s. Yachevskii Danil S.
Köhler Gottfried, s. Binder Wolfgang H.
Koozehgiri Gholam R., s. Moghaddam Firouz Matloubi
Korkmaz Nurten: New Aminoethylsulfanyl-Substituted Tribenzoporphyrazines 513
Kozma Erika: A Novel Route to *trans*-Epoxidation of Terpinen-4-ol 35
Kraft Rainer: Ternary Germanides RE_2Ge_2Mg(RE = Y, La–Nd, Sm, Gd, Tb) 1327
Kranawetter Hermann, s. Schwarzinger Clemens
Krasodomska Małgorzata, s. Bogdanowicz-Szwed Krystyna
Krinulović Katarina, s. Vasić Vesna
Kröpfl Dietmar, s. Seebacher Werner
Krstić Danijela, s. Vasić Vesna
Kulikiewicz Krystyna K., s. Bieniek Adam
Kulkarni Abhay S., s. Neelgund Gururaj M.
Kumagai Ken-ichi, s. Enomoto Shigendo
Kumar Kamal, s. Nishide Kiyoharu
Kunkely Horst: Optical Properties of Thallium(I) Perrhenate. Thallium-Localized Phosphorescence 1
Kuś Piotr: Mono-*meso*-*tert*-butylporphyrin 509

Kuźnik Anna, s. Mazurkiewicz Roman 799, 807
Kuźnik Nikodem, s. Mazurkiewicz Roman

Lackner Bernd, s. Salama Tarek A.
Lackner Bernd: Synthesis and Properties of 10,11-Dibenz-imidazolyl-10,11-didesmethyl-hypericin – The First Heterocyclically Substituted Hypericin Derivative 1157
Lai Guoqiao, s. Hu Yingyu
Lawtrakul Luckhana, s. Beyer Anton
Lawtrakul Luckhana: Quantitative Structural Rearrangement of HIV-1 Reverse Transcriptase on Binding to Non-Nucleoside Inhibitors 1033
Leško Ján, s. Saloň Jozef
Leskovac Vladimir: The *Saunders-Bell* Analysis of Tunnel Effects in Reactions with Kinetic Isotope Effects 1359
Lévai Albert, s. Patonay Tamás
Lévai Albert, s. Silva Artur M. S.
Li Yongfang, s. Hu Yingyu
Lightner David A., s. Ghosh Brahmananda 1189, 1305, 1503
Lightner David A., s. Tu Bin
Lou Ji-Dong: Efficient Oxidation of Alcohols with Potassium Permanganate Adsorbed on Aluminum Silicate Reagent 31
Lyssenko Alexei, s. Mahboobi Siavosh

Ma Jin Shi, s. Yang Lanying
Mager Sorin, s. Stuparu Mihaiela
Magyarfalvi Gábor, s. Sohár Pál
Mahboobi Siavosh: Synthesis of Naturally Occurring Pyrazine and Imidazole Alkaloids from *Botryllus Leachi* 333
Majumdar Krishna C.: Regioselective Synthesis of Thieno[3,2-*c*][1]benzopyran-4-ones by Thio-*Claisen* Rearrangement 1001
Majumdar Krishna C.: Synthesis of Sulfur Heterocycles by Thio-*Claisen* Rearrangement 581
Manicone Nico, s. Röhrich Till
Marfil Marta, s. Fernández David
Mazurkiewicz Roman: *N*-Acyl-α-triphenylphosphonioglycinates in the Synthesis of α,β-Dehydro-α-amino Acid Derivatives 807
Mazurkiewicz Roman: Three New *in situ* Syntheses of *N*-Acyl-α-triphenylphosphonioglycinates 799
McDonagh Antony F., s. Ghosh Brahmananda
Mečiarová Mária: Study of S_NAr Reactions of Halobenzenes with Imidazole under Ultrasonic and Microwave Irradiation 419
Memarian Hamid R.: Synthesis and Photochemistry of Novel 3,5-Diacetyl-1,4-dihydropyridines. II 833
Memarian Hamid Reza, s. Mohammadpoor-Baltork Iraj
Memarian Hamid Reza: [2 + 2]-Photocycloaddition of 2-Morpholinopropenenitrile to Monosubstituted Benzils 425
Mereiter Kurt, s. Hemetsberger Margit
Mereiter Kurt, s. Pavlik Sonja
Mereiter Kurt, s. Standfest-Hauser Christina M.
Mernyák Erzsébet, s. Tapolcsányi Pál
Mezei Tibor, s. Porcs-Makkay Márta
Mihovilovic Marko D.: Synthesis of Carbo- and Heterocyclic Aldehydes Bearing an Adjacent Donor Group – Ozonolysis *versus* OsO_4/KIO_4-Oxidation 899
Miklós Ferenc: Preparation and Structure of di-*exo*-Condensed Norbornane Heterocycles 839
Mikosch Hans, s. Delchev Vassil B.
Milata Viktor, s. Saloň Jozef
Miletic Gordana Z., s. Mitic Snezana S.
Milosavljević Svetlana, s. Gutman Ivan
Mirkhani Valiollah: Cerium Polyoxometalate as a Reusable Catalyst for Acetylation and Formylation of Alcohols 1257
Mishra Ratikanta, s. Heying Birgit
Mitic Snezana S.: Kinetic Spectrophotometric Determination of Chromium (VI) by Oxidation of Sodium Pyrogallol-5-sulphonate by Hydrogen Peroxide 927
Miyamoto Tetsuo, s. Nishide Kiyoharu
Moghadam Majid, s. Mirkhani Valiollah
Moghaddam Firouz Matloubi: Solvent-free Efficient Synthesis of Symmetrical Isocyanurates by a Combination Cata-

lyst: Sodium Saccharin and Tetrabutylammonium Iodide 849
Mohammadi Ali A., s. Azizian Javad
Mohammadizadeh Mohammad R., s. Azizian Javad
Mohammadkhani A., s. Habibi Mohammad H.
Mohammadpoor-Baltork Iraj: Efficient and Convenient Deprotection of Thiocarbonyl to Carbonyl Compounds Using 3-Carboxypyridinium and 2,2′-Bipyridinium Chlorochromates in Solution, Dry Media, and under Microwave Irradiation 411
Mohr Klaus, s. Pick Rainer
Mohseni Mehdi, s. Rad-Moghadam Kurosh
Molnar-Gabor Dora, s. Ašanin Darko P.
Momić Tatjana, s. Vasić Vesna
Montazerozohori M., s. Habibi Mohammad H.
Moorhoff Cornelis M.: Preparation of New Substituted Bis(benzoyl) Peroxides under Aqueous Conditions in the Presence of Stearyltrimethylammonium Chloride 397
Mosselhi Mosselhi A. N.: Novel Pentaheterocycles. First General Synthesis Entry to Functionalized Derivatives of Pyrido[2,3-*f*:6,5-*f*′]di[1,2,4]triazolo[4,3-*a*] pyrimidin-5(1*H*)-ones 211
Mulla Rahamatalla M.: Mechanistic and Spectral Studies of the Ruthenium(III) Catalysed Oxidation of Sulfanilic Acid by Alkaline Hexacyanoferrate(III) 1489
Müller Bernhard, s. Mihovilovic Marko D.
Müller Norbert, s. Kozma Erika
Muntean Luminita, s. Stuparu Mihaiela

Nagy József, s. Sánta Zsuzsanna
Naït-Si Youssef: Hypericin and Pseudohypericin. Purity Criteria and Quantitative Determination in Extracts of Saint John's Wort (*Hypericum perforatum*) 1319
Najafizadeh Fariba, s. Ghazanfari Dadkhoda
Nakada Kyoko, s. Enomoto Shigendo
Nan Alexandrina, s. Stuparu Mihaiela
Nandibewoor Sharanappa T., s. Mulla Rahamatalla M.
Nardello Véronique, s. Ganglberger Thorsten
Nasiri Farough, s. Yavari Issa
Näther Christian, s. Schaefer Michael
Nazari Mohammad, s. Saidi Mohammad R.
Neelgund Gururaj M.: EDA Complexes of 2,3-Dichloro-1,4-naphthoquinone with Some Substituted Anilines 343
Neelgund Gururaj M.: Studies on Charge-Transfer Complexes of 2,3-Dicyano-1,4-naphthoquinone with Some Ring and *N*-Substituted Anilines 1395
Neudecker Philipp, s. Eisenmann Anke
Niaki Mohammad Yazdani, s. Hosseinzadeh Rahman
Nicoletta Burger, s. Foretić Blaženka
Nishide Kiyoharu: Development of Odorless Thiols and Sulfides and Their Applications to Organic Synthesis 189
Node Manabu, s. Nishide Kiyoharu
Noe Christian R., s. Winkler Johannes
Nohman Ahmed K. H.: Precursor-Support Interactions in Silica-Supported Manganese Oxide Catalysts 269
Nyitrai József, s. Sánta Zsuzsanna

Ohsugi Shin-ichi, s. Nishide Kiyoharu
Osman Fayez H.: A Nucleophilic Addition of Acetone Enolate to (*E*)-Alkyloxindolylideneacetates 823
Otto Hans-Hartwig, s. Röhrich Till 55, 979
Otto Hans-Hartwig, s. Thaher Bassam Abu
Özgün Beytiye, s. Değirmenbaşı Nebahat
Özgün Beytiye: Oxidation of Substituted Benzyl Alcohols by Quinoxalinium Dichromate. A Kinetic Study 483

Párkányi László, s. Sánta Zsuzsanna
Pashkevich Kazimir I., s. Yachevskii Danil S.
Patonay Tamás, s. Silva Artur M. S.
Patonay Tamás: Synthesis of Racemic and Enantiomerically Enriched α-Oxyfunctionalized Benzocyclanones and Chromanones by Dimethyldioxirane and Dimethyldioxirane/Mn(III) salen System 743
Pavlik Sonja: Ruthenium Tris(pyrazolyl)-borate Complexes. Part 20. Synthesis, Characterization, and Reactivity of

Neutral Trispyrazolylborate Ruthenium Vinylidene Complexes 1349
Pavlovic Aleksandra N., s. Mitic Snezana S.
Pérez Olga, s. Fernández David
Peričin Draginja, s. Leskovac Vladimir
Pick Rainer: Allosteric Modulators of the Tertiary Alkanebisamino-Type. Variation of the Substitution of the Middle Chain Nitrogens 1539
Pirelahi Hooshang: Competitive Photochemical Pathways in the Rearrangement of Tetrasubstituted 4*H*-Thiopyrans 973
Plé Gérard, s. Stuparu Mihaiela
Pöchlauer Peter, s. Ganglberger Thorsten
Podlesná Janka, s. Mečiarová Mária
Polborn Kurt, s. Reimann Eberhard
Porcs-Makkay Márta: New Routes to Oxindole Derivatives 697
Porzi Gianni, s. Arcelli Antonio
Pöttgen Rainer, s. Heying Birgit
Pöttgen Rainer, s. Kraft Rainer
Prónayová Nada, s. Dugovič Branislav
Prónayová Nadežda, s. Saloň Jozef
Presser Armin: Trimethylsilyldiazomethane – A Mild and Efficient Reagent for the Methylation of Carboxylic Acids and Alcohols in Natural Products 1015
Pumpor Ksenia: Hexafluoroacetone as a Protecting and Activating Reagent. Regioselective Esterification of Aspartic, Malic, and Thiomalic Acid 1427

Radenković Slavko, s. Gutman Ivan
Rad-Moghadam Kurosh: A Route to the Synthesis of Novel Coumarins 817
Rajković Snežana, s. Ašanin Darko P.
Rajvanshi Shefali, s. Sondhi Sham M.
Reimann Eberhard: A Convenient Synthesis of 1-Benzyl-1,2,3,4-tetrahydroisoquinolines by Combined *Strecker*/*Bruylants* Reaction 1289
Reimann Eberhard: A Novel Stereoselective Synthesis of *cis*-Configured Erythrinane and Erythrinane Type Analogues 959
Reimann Eberhard: An Improved Stereocontrolled Route to *cis*-Erythrinanes by Combined Intramolecular *Strecker* and *Bruylants* Reaction 1143
Reimann Eberhard: Angularly Substituted Octahydroindoles, Decahydroquinolines, Octahydropyrindines, and Octahydrocyclopenta[b]pyrroles by *Bruylants* Reaction 557
Reznicek Gottfried, s. Huefner Antje
Rodewald Ute Ch., s. Heying Birgit
Rodriguez-Barbarin Cecilia, s. Anacona J. R.
Röhrich Till: Substituted 1,2-Thiazetidine 1,1-Dioxides. Synthesis and Properties of N-Alkylated and N-Acylated Derivatives of 1,2-Thiazetidine-3-acetic Acid 1,1-Dioxide 55
Röhrich Till: Substituted 1,2-Thiazetidine 1,1-Dioxides. Synthesis of (*RS*)- and (*S*)-1,2-Thiazetidine-3-acetic Acid 1,1-Dioxide and its Reactions with Amino Acids and Dipeptides 979
Rösch Paul, s. Eisenmann Anke
Rudan-Tasic Darja: Apparent Specific Volume and Apparent Specific Refraction of Some Poly(oxyethylene) Glycols in 1,4-Dioxane and Benzene Solutions at 298.15 K 1209
Rudan-Tasic Darja: Osmotic Coefficients of Aqueous Solutions of Some Poly (oxyethylene) Glycols at the Freezing Point of Solution 773

Saf Robert, s. Seebacher Werner
Saglam Nagihan: DNA Hydrolysis by Homo- and Heteronuclear Cu(II)–Ni(II) Complexes of Two Diester-type Ligands 1023
Said Abd El-Aziz A., s. Abd El-Wahab Mohamed M. M.
Saidi Mohammad R.: Aminoalkylation with Aldehydes Mediated by Solid Lithium Perchlorate 309
Sailer Reinhard, s. Strommer Rainer
Salama Tarek A.: Synthesis of 6-Heterocyclically Appended Tri-*O*-methyl Protected 6-Desmethyl Emodin Derivatives 735
Saloň Jozef: Synthesis, Properties, and Reactions of 5-Substituted Derivatives of 2,3-Diphenylquinoxaline 283
Sanchuli Esmaiel, s. Eshghi Hossein
Sandri Monica, s. Arcelli Antonio
Sandri Sergio, s. Arcelli Antonio
Sánta Zsuzsanna: Synthesis of Enantiomerically Pure 2-Isoxacephems 671
Sarlo Francesco De, s. Cordero Franca M.

Sastre de Vicente Manuel E., s. Brandariz Isabel
Schaefer Michael: Solvothermal Synthesis, Crystal Structure, and Properties of the First Zinc Containing Thioantimonate(III)[Zn(*tren*)]$_2$Sb$_4$S$_8$ · 0.75 H$_2$O 461
Schmid Roland, s. Pavlik Sonja
Schmid Roland, s. Standfest-Hauser Christina M.
Schneider Gyula, s. Tapolcsányi Pál
Schollmeyer Dieter, s. Mahboobi Siavosh
Schramm Hans Wolfgang, s. Strommer Rainer
Schwarzinger Bettina: Concerning the Photodiastereomerization and Protic Equilibria of Urocanic Acid and its Complex with Human Serum Albumin 1297
Schwarzinger Clemens: Analysis of the Active Compounds in Different Parts of the *Schisandra chinensis* Plant by Means of Pyrolysis-GC/MS 1201
Schwarzinger Stephan, s. Eisenmann Anke
Seebacher Werner: New Derivatives of 4-Aminobicyclo[2.2.2]octanones and -ols as Potential Antiprotozoals 313
Šegatin Nataša: Limiting Partial Molar Volumes of Water in 1-Hexanol, 1-Octanol, 1-Decanol, and Cyclohexanol at 298.15 K 161
Šegatin Nataša: Thermodynamics of the Solubility of Water in 1-Hexanol, 1-Octanol, 1-Decanol, and Cyclohexanol 241
Seger Christoph, s. Strommer Rainer
Sellmer Andreas, s. Mahboobi Siavosh
Seman Milan, s. Saloň Jozef
Serbest Kerim, s. Saglam Nagihan
Serda Paweł, s. Bogdanowicz-Szwed Krystyna
Seyyedmoossavi Seyyedmajid, s. Pirelahi Hooshang
Shaabani Ahmad: A Novel Three-Component Tetrahydrobenzofuran Synthesis 441
Shaabani Ahmad: One-pot Three-component Condensation Reactions in Water. An Efficient and Improved Procedure for the Synthesis of Furan Annulated Heterocycles 589
Shakoori Alireza, s. Hosseinzadeh Rahman
Shawali Ahmad S., s. Mosselhi Mosselhi A. N.
Shen Yongjia, s. Hu Yingyu
Shirini Farhad: Al(HSO$_4$)$_3$ as an Efficient Catalyst for the Acetylation of Alcohols in Solution and Under Solvent Free Conditions 279
Shoukry Azza A., s. Bugarčić Živadin D.
Shoukry Mohamed M., s. Bugarčić Živadin D.
Silva Artur M. S.: Bromination and Azidation Reactions of 2-Styrylchromones. New Syntheses of 4(5)-Aryl-5(4)-(2-chromonyl)-1,2,3-triazoles 293
Šima Jozef: Photoredox Reactions Occurring in Methanolic Solutions of Iron(III) Azido Complexes with *N,N'*-Ethylenebis (salicylaldiminato) *Schiff* Base Derivatives 5
Simig Gyula, s. Porcs-Makkay Márta
Singh Nirupma, s. Sondhi Sham M.
Sohár Pál, s. Miklós Ferenc
Sohár Pál: Synthesis and Stereostructure of Saturated Isoindolone-Fused Hetero Tri-, Tetra-, and Pentacyclic Compounds 1519
Sondhi Sham M.: β-Isothiocyanatoketones: A Convenient Source of Heterocyclic Compounds 119
Spengler Jan, s. Böttcher Christoph 853, 1225
Spengler Jan, s. Pumpor Ksenia
Spina Markus, s. Mihovilovic Marko D.
Stájer Géza, s. Miklós Ferenc
Stájer Géza, s. Sohár Pál
Standfest-Hauser Christina M.: Formation of a Hydroxo-bridged Dinuclear Ru(III)/Ru(III) Complex from *N*-Methylimidazole and [Ru*Cp*(CH$_3$CN)$_3$]$^+$ 911
Stanetty Peter, s. Fröhlich Johannes
Stanetty Peter, s. Mihovilovic Marko D.
Stefaniak Marta, s. Kuś Piotr
Strauss Wolfgang, s. Strommer Rainer
Strommer Rainer: Synthesis of 6-Hydroxy Derivatives of Steroidal Hormones by SeO$_2$ Mediated Oxidation 1137
Stuparu Mihaiela: Synthesis and Stereochemistry of Some New 1,3-Oxathiane Derivatives 89

Svete Jurij: Ex-Chiral Pool Enaminones in the Synthesis of Functionalised Heterocycles 629
Szabó Angela E., s. Sohár Pál
Szabó György, s. Györgydeák Zoltán

Tabar-Heidar Kourosh, s. Darabi Hossein R.
Taha Mohamed, s. Khalil Mohamed M.
Tajbakhsh Mahmood, s. Hosseinzadeh Rahman
Tamura Taro, s. Enomoto Shigendo
Tangestaninejad Shahram, s. Mirkhani Valiollah
Tantak Chanda D., s. Jachak Madhukar N.
Tapolcsányi Pál: The *Mitsunobu* Inversion Reaction of Sterically Hindered 17-Hydroxy Steroids 1129
Tayyari Sayyed Faramarz, s. Eshghi Hossein
Teimouri Mohammad B., s. Shaabani Ahmad 441, 589
Terec Anamaria, s. Stuparu Mihaiela
Thaher Bassam Abu: On the Synthesis of 3-Acetyl-1-aryl-1,4,5,6-tetrahydro-1*H*-1,2,4-triazepin-7-ones by Reaction of Nitrilimines with 3-Aminopropanoic Acid 435
Thaher Bassam Abu, s. Röhrich Till 55, 979
Toche Raghunath B., s. Jachak Madhukar N.
Toma Štefan, s. Mečiarová Mária
Tosic Snezana B., s. Mitic Snezana S.
Tränkle Christian, s. Pick Rainer
Treu Matthias, s. Hemetsberger Margit
Trivić Svetlana, s. Leskovac Vladimir
Trost Barry M.: Foreword: Heterocyclic Chemistry VII
Tu Bin: Novel Linear Tetrapyrroles: Hydrogen Bonding in Diacetylenic Bilirubins 519
Turković Nedžad, s. Gutman Ivan

Urban Ernst, s. Winkler Johannes

Valldor Martin, s. Heying Birgit
Vasić Vesna: *ATP*ases as Multi-Response Sensing System for Various Organic and Inorganic Analytes 605
Vieira Judite S., s. Silva Artur M. S.
Vilariño Teresa, s. Brandariz Isabel
Vladimirov Sote, s. Brborić Jasmina S.
Vogler Arnd, s. Kunkely Horst
Volk Balázs, s. Porcs-Makkay Márta

Wang Lan-Zhou, s. Lou Ji-Dong
Weis Robert, s. Seebacher Werner
Wiegrebe Wolfgang, s. Jirovsky David
Windeisen Elisabeth, s. Pumpor Ksenia
Winkler Johannes: β-Methyl-2-amino-2,3-didesoxyribofuranoside, a Novel Building Block for Backbone Modified Antisense Oligonucleotides 109
Wölfling János, s. Tapolcsányi Pál
Wolschann Peter, s. Beyer Anton
Wolschann Peter, s. Lawtrakul Luckhana

Xie Qiyou, s. Yan Bing

Yachevskii Danil S.: Synthesis and Tautomeric Equilibrium of Polyfluoroacyl-Containing 1,5-Benzodiazepines 23
Yadollahi Bahram, s. Mirkhani Valiollah
Yan Bing: The Photophysical Properties of Quaternary Lanthanide (Eu^{3+}, Tb^{3+}, Sm^{3+}, Dy^{3+}) Functional Molecular Complexes 757
Yang Lanying: Molecular Rectangle Formed by Head-to-tail Self-Assembly of 1-(Dipyrrin-2-yl)-1′-(dipyrrin-3-yl) methane 223
Yavari Issa: *Ab Initio* Study of Conformational Properties of (*Z*,*Z*)-, (*E*,*Z*)-, and (*E*,*E*)-Cyclonona-1,5-dienes 937
Yavari Issa: Synthesis of Highly Functionalized 1-Azadienes and Ketenimines 543

Zahra Jalal A., s. Thaher Bassam Abu
Zhang Yi, s. Yang Lanying
Zhu Li-Yun, s. Lou Ji-Dong
Zolfigol Mohammad A., s. Shirini Farhad

Subject Index

Ab initio 371
Ab initio calculations 249, 937, 1373
Acetals 1243
Acetic anhydride 279
Acetone 823
Acetylation 35, 279, 313, 1257
Acetylcholine esterase inhibitor 1275
Acetylenes 1349
Acetylenic esters 543, 817
Acylation 173, 697
N-Acyl-α-triphenylphosphonioglycinates 799, 807
N-Acyl-α-triphenylphosphoranylideneglycinates 807
Alcohol 793, 1015, 1257
Alcohols 31, 161, 189, 241, 279, 407, 1251
Aldehydes 309, 447, 1265
$Al(HSO_4)_3$ 279
Alkaline elements 605
Alkaloids 549, 959, 1143, 1289
Alkanebisamine-type compounds 1539
Alkanes 493
Alkyl isocyanides 543
Alkylation 697
1-Alkylisatin 729
Allylic alcohols 713
Allylic halides 581, 1001
$AlPO_4$ 357
Aluminum silicate 31
Amines 595
Amino acids 385, 629, 1455
Amino alcohol 313
Amino sugar 109
Aminoalkylation 309
2-Aminoimidazoles 173
4-Aminoperoxybenzoic acid 185, 1409
4-Aminopyridinium chlorochromate 793
4-Aminopyrimidone 1529
Analytical standards 549
Angularly substituted *N*-heterocycles 557
Anilides 69
Annular tautomers 333
9,10-Anthraquinones 735
Antibacterial activity 283
Antibiotics 671
Antiinflammatory 119
Antioxidant 231
Apparent specific refraction 1209
Apparent specific volume 1209
Aromatization 833
5-Aroyluracils 1529
Arylacetonitrilimines 435
Aryl ketones 1409
4-Arylpyrimidone 1529
Atomic force microscopy 13
ATPase 605
Average aggregation number 161
1-Azadienes 543
Azidation 293
Azide 5

B3LYP 371
Bell equation 1359
Benzene solutions 1209
Benzo-annelated perylenes 1389
Benzylic methylene 185
Bi-, tri-, tetra-, and pentacyclic 119
Bicyclo[2.2.1]heptane derivatives 839
Biladiene-*ac* 223
Bile pigments 1503
Binaphthyl ligands 885
Binary and ternary complexes 385, 1455
Biological activity 1061
Biological matrices 1563
Biologically active compounds 333
Bis(*p*-alkoxybenzoyl) peroxide 397
Bis(*p*-alkylbenzoyl) peroxide 397
Bis(*p*-*n*-butoxybenzoyl) peroxide 397
Bis(*p*-*n*-decylbenzoyl) peroxide 397
1,1′-Bis(pyridinium-4-aldoxime)trimethylene dibromide 261
Blend 493
Botryllus leachi 333
Branched depsipeptides 1427
Branched peptides 1427
Bromides 1251
Bromination 293
Bromine-lithium exchange 323

Calcination 1081
Calibration 1475
Captodative olefins 425
Carbohydrates 109
Carbonyl compounds 407, 411
Carboxylic acids 69, 1015, 1129
Catalysis 357, 1489
Catalyst 1101

Cationic glycine equivalent 799
Cerium polyoxometalate 1257
Charge transfer 1
Chemical graph theory 765
Chemical nuclease 1023
Chiral building block 671
Chirality 885
Chlorochromates 411
Chlorodithioformates 879
7-Chloro-4-hydroxydithiocoumarin 581
Chromium determination 927
Cinnolines 595
Cobalt 41, 513
Combinatorial Chemistry 615
Complexes 151, 249
Condensation 45, 823
Condensation reaction 441
Conformation 89
Conformational analysis 519, 937, 1189
Copper 785, 1023
Copper oxide 1081
Corey-Kim oxidation 189
Coumarin 817
Cross-coupling reactions 615
Crystal chemistry 1327, 1335
Crystal structure 201, 461
CT-complex 343, 1395
Curcumin 231
Cyclic conjugation 1389
Cyclic 1,3-diketone 441
Cyclic voltammetry 1167
Cyclisations 283, 435, 629, 839, 1289
Cycloadditions 595

2,6-*DCPCC* 1243
Dealkylation 189
α,β-Dehydro-α-amino acids 807
Dehydrobromination 293
Density functional calculations 249, 1373
Deprotection 411, 1243
Detection 605
DFT calculations 911
1,1-Diacetates 1243
Diamines 1101
Diastereomerization 1297
Diastereomers 1519
Diastereoselective cyclizations 959, 1143
Diastereotopicity 89
Diazaphospholidin 1113
2,3-Dichloro-1,4-naphthoquinone (*DClNQ*) 343
2,3-Dicyano-1,4-naphthoquinone (*DCNQ*) 1395
Dielectrophiles 853, 865, 1225
1,3-Dienes 879
Difference in the solvation *Gibbs* energy 161
DIFFN*O*E 1519
Dihydroindolizines 1173
Dihydrophenazine 1557
1,4-Dihydropyridines 833
Dihydrothiopyran-*S*-oxides 879
α-Diketones 1409
Dilithio reagent 323
Di-π-methane rearrangement 973
Dimethyl fumarate 1563
1,3-Dimethyluracils 1529
Dinuclear complexes 911
Dinuclear dimeric complex 223
1,4-Dioxane solutions 1209
Dioxirane 743
Dioxole 1557
Dipolar cycloaddition 685
Dipyrrin 223
1-(Dipyrrin-2-yl)-1′-(dipyrrin-3-yl) methane 223
Dissociation constants 261
Disulfides 41
Dithiamaleonitrile 513
DNA cleavage 1023
Domains 13
Drug research 1275, 1539
Drug resistance 1047
Dynamic processes 1089

EDA complex 343
1,5-Electrocylization 1173
Electrode response 1475
Electron transfer 231
Electronic spectra 1
Electrophiles 323
Electrophilic substitution reactions 1265
Enaminones 629
Enantioselective catalysis 885
Enantioselective epoxidation 743
Enantioselectivity 671
Energy-effect of cyclic conjugation 1389
Enolacetates 743
Enols 283
trans-Epoxidation 35
Epoxide rearrangement 713
Epoxides 1101

Equilibrium 151
Erythrinane type frameworks 959
ESI-MS spectra 509
Esterification 357
Esters 83
Estrone derivatives 1129
Ethylbenzene 1121
Excess *Gibbs* energy 241, 773

Fatty acid 447
Fluoranthene-benzene molecular complex 471
Fluorescence 13, 231
Formylation 1257
FT *Raman* spectroscopy 1101
Fumaric acid 1563
Furocoumarine 589
Furopyranone 589

Galanthamine analogue 1275
Germanides 1327
Glass electrode 1475
α-Glucosidase 951
Glycine α-functionalization 799
N-Glycopeptides 853
Glycopeptoids 865
Glycosidase inhibitors 951
Glycosylamines 865, 1225
N-Glycosylamino acids 853
N-Glycosylated depsipeptides 1225
Glycosylation 1061
N-Glycosylation 853, 865
Group 2B transition metal complexes 919
Guanine 1373

Half-lives 1173
Halobenzenes 419
Halogenation 1009, 1251
Halohydrin 1101
Haloquinone 1557
Heavy metals 605
Herbicidal activity 1113
Heterocycles 45, 89, 173, 211, 549, 615, 735, 833, 839, 1157
Hetero-*Diels-Alder* reaction 97
α-Heterosubstituted glycine derivatives 799
Hexacyanoferrate(III) 1489
Hexafluoroacetone 853, 865, 1427
HIV-1 reverse transcriptase 1033
HPLC-DAD 1319
Hydantoin and thiohydantoin nucleosides 1061
Hydrazones 595
Hydrazonothioates 211
Hydrazonoyl chlorides 211
Hydridotrispyrazolylborate 1349
Hydrogen bonding 519, 1189, 1305, 1503
Hydrogen transfer 885
Hydrogen transfer reactions 1359
Hydrogenation 313, 1289
Hydrogen-bonding 1373
Hydrolysis 83, 1445
Hydroxamic acids 1455
α-Hydroxy acids 1225
α-Hydroxyacylamino acids 1225
11β-Hydroxy-15-methoxyerythrinane 959
3-Hydroxysuccinimido sugars 1225
Hypericin 1319

IDA analogues 1009
Imidazole 419
Iminodiacetic acid 865
Indoles 1265
Inhibition mechanism 1047
Interactions 269
Intramolecular *Strecker* reaction 557
Intramolecular *Wittig* reaction 817
Iodides 1251
Iodination 1289
Iodine-magnesium exchange reaction 1143, 1289
IR spectroscopy 1009
Iron(III) complexes 5
Isatins 697
Isocratic HPLC 1563
Isocyanide 589
Isocyanides 441
Isoindolones 839, 1519
(*Z*,*E*)-Isomerization 447
Isomers 1129
Isopiestic measurements 241
Isothiocyanatoketones 119
Isotopic labeling 549
Isoxazolidines 685

Jacobsen-Katsuki's catalyst 743
pH-Jump 1297

Ketenimines 543
Keto–enol 371

Ketones 1265
Kinetic isotope effect 1359
Kinetics 483, 1121
Kinetic spectrophotometric method 927

β-Lactams 671
Lawesson's reagent 1113
Libraries 615
Lignans 1201
Limiting partial molar volume 161
Linear tetrapyrroles 1305
Lipid bilayer membrane 13
Lipid-polymer conjugate 13
Liquid–liquid equilibrium 493
Lithiation 69
Luminescence 1
Luminescence detection 501

M_2-receptors 1539
Magnesium 513
Magnetochemistry 1335
Malaprade reaction 899
Maleimido sugars 1225
Manganese 41
Manganese acetate and oxalate 269
Mannich reaction 309
Marine alkaloids 615
Mass spectroscopy 1009
Mechanism 5, 483
Medium rings 937
N-Me-imidazole 911
α-Mercapto acids 1225
α-Mercaptoacylamino acids 1225
4-Mercaptocoumarin 1001
Metabolism 1189
Metal coated 1121
Metallophthalocyanine 1167
Methanobenzoxazinones 1519
Methanol 83
Methionine-containing peptides 1445
Methylation 1015
Michael addition 189, 201, 1415
Microwave 79, 1113
Microwave heating 685
Microwave irradiation 419
Mitsunobu reaction 1129
MnO_x 269
MO calculations 471
Modified double lattice model 493
Molecular assembly 757
Molecular fragment principle 757
Molecular modeling 937
Mono-*meso-tert*-butylporphyrin 509
Monomethyl fumarate 1563
1,4-Morpholine-2,5-diones 951

Natural products 1015, 1201
NH-Acids 543
Nickel 1023
4-Nitrobenzaldehyde 441
Nitrogen heterocycles 649
Nitrones 685
β-Nitrostyrene 1415
N-Ligands 919
NMR 23, 1137, 1519
NMR spectra 509
NMR spectroscopy 89, 173, 1009, 1089
NMR Structure elucidation 735
Non-bonding molecular orbitals 765
Non-nucleoside inhibitors 1033
Non-nucleoside reverse transcriptase inhibitors (NNRTIs) 1047
Nucleic acid components 1455
Nucleolytic activity 1023
Nucleophilic addition 323
Nucleophilic aromatic substitutions 419
Nucleophilic substitution 799
Nucleophilic substitutions 283
Nucleosides 629

Oligonucleotides 109
Optical spectroscopy 1167
Organic compounds 605
Organic fluorides 1251
Osmium tetroxide 899
Osmotic coefficients 241
Oxetanes 425
Oxidation 31, 41, 185, 313, 407, 483, 793, 879, 899, 1409
Oxindoles 697
Oxindolylideneacetates 823
3-Oxoacid thioanilides 1415
3-Oxopropionyl halogenide 371
Ozonization 501
Ozonolysis 899

Palladium 151
Palladium(II) complexes 1445
Parasubstituted benzoylacetonitrile 1529
Paternò-Büchi reaction 425
Peptidomimetics 1427
Peptoids 865

Perylene 1389
Phase transfer catalysed alkylation 581, 1001
Phase transfer catalyst 849
Phenanthroperylenequinone 1157
o-Phenylenediamine 23
Phosphorine 1113
Photochemistry 425, 833, 1297
Photochromism 1173
Photodynamic therapy 1157
Photo-fatigue 1173
Photoisomerization 973
Photolysis 5
Photooxidation 833, 1121
Photophysical properties 757
Phthalides 69
Physical properties 461
Polyester 1427
Poly(oxyethylene) glycols 773, 1209
Polystyrene 493
Porphyrazines 513
Porphyrin 509
Potassium hydroxide 83
Potassium periodate 899
Potassium permanganate 31
Potentiometric studies 1455
Potentiometry 1475
Prochirality 89
Progesterone 1137
Propylenedithiotetrathiafulvalene 1167
Protein-ligand interactions 1033
Proteins 1089
Protic equilibria 1297
Proton concentration 1475
Pseudohypericin 1319
Purity criteria 1319
Pyran 817
2*H*,5*H*-Pyrano [3,2-*c*][1]benzopyran-5-one 817
Pyrazine and imidazole alkaloids 333
Pyrazoles 595
Pyridoquinoxalines 283
Pyrimidines 119, 1061
Pyrimidopyridazine 45
Pyrolysis-gas chromatography/mass spectrometry 1201
Pyrrole 519, 1189

Quantum yield 5
Quaternary lanthanide functional molecular complexes 757
Quenching 231
Quinaldinium dichromate 407
Quinaldinium fluorochromate 407
3*H*-Quinazolin-4-one 323
Quinoxalinium dichromate 483

Rare earth compounds 1327, 1335
Regiochemistry 211
Regioselectivity 697, 713
Rhenium 1
Ribose derivatives 109
Ring contraction 649
Ring expansion 649
Ruthenium 911, 1349
Ruthenium(III) 1489
Ruthenium complexes 885

Scaled particle theory 161
Schiff bases 173
Schisandra chinensis 1201
SEDEX 501
Selenium dioxide 1137
Self-assembly 223
Semiempirical calculations 1157
[1,3]-Sigmatropic rearrangement 973
[3,3] Sigmatropic rearrangement 581, 1001
Silica 269
Silica gel 41, 185, 793, 1409
Silyl enol ethers 69
Small ring system 649
Sodium pyrogallol-5-sulphonate oxidation 927
Sodium saccharin 849
Solid Lithium Perchlorate 309
Solid solution 1081
Solid-phase synthesis 615
Solubility 241
Solute activity coefficients 773
Solvent-free 79
Solvent free conditions 279, 849
Solvothermal synthesis 461
Spectrophotometric 343
Spectrophotometric method 1395
Spectrophotometry 261
Spectroscopic parameters 1395
Spiro compounds 959, 1143, 1557
Spirocycles 823
Spiro[cycloalkanono-2,3′-thiophenes] 1415
γ-Spirolactones 729

Stability constants 385, 1455
Stearyltrimethylammonium chloride 397
Stereochemistry 937, 1305, 1503
Stereoselectivity 685
Steroids 1129
Structure 357
Structure analysis 911, 1349
Structure elucidation 1089
Structure-activity relationship 313, 1539
2-Styrylchromones 293
p-Substituted benzaldehyde 589
Sugar derivatives 1061
Sulfanilic acid 1489
Sulfines 879
β-Sultam 55, 979
β-Sultam peptide 55, 979
Superoxide dismutase activity 785
Swern oxidation 189
Symmetrical triaryl isocyanurate 849

Tandem cyclization 1275
Tautomerism 23, 1157
Terpenes 629
Terpinen-4-ol 35
Testosterone 1137
Tetrahydrobenzofuran 441
Texture 357
Thallium 1
Thermal rearrangement 649
Thermal stability 1297
Thermodynamic 343
Thermodynamic parameters 1395
1,2-Thiazetidine 1,1-dioxide 55, 979
Thiazole 201
(2-Thienylcarbonyl)thioacetanilides 201
4-(2-Thienyl)pyridine 201
Thioacetals 1243
Thioamides 79
Thioantimonates 461
Thiocarbonyl compounds 411
Thio-*Claisen* rearrangement 581, 1001
Thioesters 79
Thiols 41, 151
2*H*-Thiopyran 973
4*H*-Thiopyran 973
Thiopyrans 97
Three-component 589
Tin(II) triflate 501
TiO_2 1121
Tobacco nitrosamines 549
Tosylation 35
Total π-electron energy 765
Total synthesis 1275
1,2,4-Triazepin-7-ones 435
1,2,3-Triazoles 293
s-Triazolopyrimidopyridazine 45
Tricine 385
1,3,5-Triketones 23
Tri-*O*-methylemodin aldehyde 735
Tri-*O*-methylemodin nitrile 735
Trimethylsilyldiazomethane 1015
Triphenylphosphine 729
Tryptanthrine 729

Ugi reaction 543
Ultrasonic 79
Ultrasonic irradiation 419
α,β-Unsaturated thioamides 97
Upper critical solution temperature 493
UV-Vis spectroscopy 1319

V_2O_5 357
Vinylidene complexes 1349
Viral mutation 1047

Water 161
Water solutions 773
Weak intermolecular interaction 471
Wittig Reaction 447, 807

X-Ray structure determination 557, 919
XRD 1081

Ylides derived from glycine 807

Zinc 513
Zinc oxide 1081